Chang	r: <u>09/236,99</u> ed a lile from non-ASC	CII 10 ASCII	NTEDE	Vorlhod by: _	(STIC
Chang	od the margins in case	es where the sequ	ence lext was	down to the	
Edited	a lormat error in the C	Current Application	Data section, speci	dically:	NOV 1 3
					TECH CENTER
	the Current Application the prior a			number. The num	• •
Added I	the mandatory headin	ig and subheadings	s for *Current Applic	ation Data*.	
 Edited t	tho 'Number of Seque	ences" field. The a	pplicant spelled out	a number instead	of using an integer
Change	ed the spelling of a ma	indatory lield (the h	neadings or subheac	dings), specifically	۷.
Conecte	ed the SEQ ID NO wh	en obviously incom	rect. The sequence	numbers that wer	ro edited were:
Inserted	or corrected a nucleio	c number at the en	d of a nucleic line.	SEO ID NO's edit	.ed:
Corrocte	ed subheading placem I placed a response b	nent. All responses below the subheading	s must be on the san	ne line as each su to its appropriato	ibheading. If the place.
Inserted	I colons alter headings	s/subheadings. He	eadings edited includ	ded: • .	
Deleted	extra, invalid, heading	gs used by an appl	icant, specifically:		
Deletod	i on-ASCII garbi numbers throughou	ago* at the beginni и text; П other in	ing/end of filos; walid toxt, such as_	secretary initials/	lilenamo at end of t
Inserted	mandatory headings,	, specifically:			
Correcte	ed an obvious error in	the response, spec	cifically:		
Edited id	dentifiers where upper	case is used but le	ower caso is require	ed, or vice versa.	-
Correcte	d an error in the Num	ber of Sequences	field, specifically:		
A "Hard f	Pago Break* code was	s inserted by the a	pplicant. All occurre	ences had to bo di	eloted.
	ndlng stop codon in a atentln bug). Sequen				
Other:	5 ,				_

Examiner: The above corrections must be communicated to the applicant in the first Office J/1/95 Action. DO NOT send a copy of this form.

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/236,995B

DATE: 08/14/2001 TIME: 15:54:41

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NOV 1 3 2001

3 <110> APPLICANT: Mahajan, Pramod B. **TECH CENTER 1600/2900** Zuo, Zhuang 6 <120> TITLE OF INVENTION: Poly ADP-Ribose Polymerase Gene and Its Uses 8 <130> FILE REFERENCE: 5718-34, 035718-174234 10 <140> CURRENT APPLICATION NUMBER: 09/236,995B 11 <141> CURRENT FILING DATE: 1999-01-26 13 <150> PRIOR APPLICATION NUMBER: 60/072,785 14 <151> PRIOR FILING DATE: 1998-01-27 16 <160> NUMBER OF SEQ ID NOS: 5 18 <170> SOFTWARE: PatentIn Ver. 2.1 20 <210> SEQ ID NO: 1 21 <211> LENGTH: 2949 22 <212> TYPE: DNA 23 <213> ORGANISM: Zea mays 25 <220> FEATURE: 26 <221> NAME/KEY: CDS 27 <222> LOCATION: (1)..(2949) 29 <220> FEATURE: 30 <221> NAME/KEY: misc_feature 31 <222> LOCATION: (1)..(2949) 32 <223> OTHER INFORMATION: n=A, T, C, or G 34 <220> FEATURE: 35 <221> NAME/KEY: misc_feature 36 <222> LOCATION: (1)..(2949) 37 <223> OTHER INFORMATION: Xaa=unknown 39 <400> SEQUENCE: 1 40 atg gcg gcg ccg cca aag gcg tgg aag gcg gag tat gcc aag tct ggg 48 41 Met Ala Ala Pro Pro Lys Ala Trp Lys Ala Glu Tyr Ala Lys Ser Gly 42 44 cgg gcc tcg tgc aag tca tgc cgg tcc cct atc gcc aag gac cag ctc 96 45 Arg Ala Ser Cys Lys Ser Cys Arg Ser Pro Ile Ala Lys Asp Gln Leu 20 25 48 cgt ctt ggc aag atg gtt cag gcg tca cag ttc gac ggc ttc atg ccg 144 49 Arg Leu Gly Lys Met Val Gln Ala Ser Gln Phe Asp Gly Phe Met Pro 40 52 atg tgg aac cat gcc agg tgc atc ttc agc aag aag aac cag ata aaa 53 Met Trp Asn His Ala Arg Cys Ile Phe Ser Lys Lys Asn Gln Ile Lys 50 55 56 tcc gtt gac gat gtt gaa ggg ata gat gca ctt aga tgg gat gat caa 57 Ser Val Asp Asp Val Glu Gly Ile Asp Ala Leu Arg Trp Asp Asp Gln 60 gag aag ata cga aac tac gtt ggg agt gcc tca gct ggt aca agt tct 288 61 Glu Lys Ile Arg Asn Tyr Val Gly Ser Ala Ser Ala Gly Thr Ser Ser 85 64 aca gct gct cct cct gag aaa tgt aca att gag att gct cca tct gcc 65 Thr Ala Ala Pro Pro Glu Lys Cys Thr Ile Glu Ile Ala Pro Ser Ala 66 100 105

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74		130					135					140					
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78	145	птѕ	Ата	ASII	Cys	150	Pne	GIU	val	Ser	Pro 155	Ser	Ala	Thr	Val		
80	aag	ttc	tca	ggc	tgg		act	ttg	tcc	gat		qat	aaσ	aσa	acc	160 ato	528
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82 84	ctc	as+	a++	~++	165					170					175		
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89 90	Ser	Lys	Arg	Lys	Lys	Ser	Glu	Asn	Asp	Ile	Asp	Ser	Tyr	Lys	Ser	Ala	
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93	Arg	Leu	Asp	Glu	agt Ser	Thr	Ser	gaa Glu	Glv	aca Thr	gtg Val	Cga Ara	aac Aen	aaa	ggg	caa	672
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97	Leu 225	Val	Asp	Pro	Arg	Gly	Ser	Asn	Thr			Ala	Asp	Ile	Gln	Leu	
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101 102 104 105	Lys aag Lys	Leu act	Ly.s cat	Glu gta Val	Gln 245 tcg Ser	Ser gct	Asp gct	Thr gaa	Leu tta Leu	Trp 250 agg Arg	Lys	Leu atq	Lys	Asp gag Glu	Gly 255 gct Ala	Leu	
101 102 104 105	Lys aag Lys	Leu act Thr	Lys cat His	gta Val 260	Gln 245 tcg Ser	Ser gct Ala	Asp gct Ala	Thr gaa Glu	tta Leu 265	Trp 250 agg Arg	Lys gat Asp	Leu atg Met	Lys ctt Leu	gag Glu 270	Gly 255 gct Ala	Leu aat Asn	816
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101 102 104 105 106 108 109 110	Lys aag Lys ggg Gly gat	act Thr cag Gln	Lys cat His gat Asp 275	gta Val 260 aca Thr	Gln 245 tcg Ser tca Ser	gct Ala gga Gly	Asp gct Ala cca Pro	Thr gaa Glu gaa Glu 280 ctg	tta Leu 265 agg Arg	Trp 250 agg Arg cac His	Lys gat Asp cta Leu	Leu atg Met ttg Leu	ctt Leu gat Asp 285	gag Glu 270 cgc Arg	Gly 255 gct Ala tgt Cys	Leu aat Asn gcg Ala	816
101 102 104 105 106 108 109 110 112	Lys aag Lys ggg Gly gat Asp	act Thr cag Gln gga Gly	Lys cat His gat Asp 275	gta Val 260 aca Thr	Gln 245 tcg Ser tca Ser	gct Ala gga Gly	gct Ala cca Pro gcg Ala	Thr gaa Glu gaa Glu 280 ctg	tta Leu 265 agg Arg	Trp 250 agg Arg cac His	Lys gat Asp cta Leu	atg Met ttg Leu cca Pro	ctt Leu gat Asp 285	gag Glu 270 cgc Arg	Gly 255 gct Ala tgt Cys	Leu aat Asn gcg Ala	816 864
101 102 104 105 106 108 109 110 112 113	Lys aag Lys ggg Gly gat Asp	act Thr cag Gln gga Gly 290	cat His gat Asp 275 atg	gta Val 260 aca Thr cta	Gln 245 tcg Ser tca Ser ttt Phe	gct Ala gga Gly gga Gly	gct Ala cca Pro gcg Ala 295	Thr gaa Glu gaa Glu 280 ctg Leu	tta Leu 265 agg Arg ggt Gly	Trp 250 agg Arg cac His cct Pro	gat Asp cta Leu tgc Cys	atg Met ttg Leu cca Pro	ctt Leu gat Asp 285 gtc Val	gag Glu 270 cgc Arg tgt Cys	255 gct Ala tgt Cys gct Ala	aat Asn gcg Ala aat Asn	816 864 912
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101 102 104 105 106 108 119 110 112 113 114 116 117	Lys aag Lys ggg Gly gat Asp ggc Gly 305	act Thr cag Gln gga Gly 290 atg Met	Lys cat His gat Asp 275 atg Met tac	gta Val 260 aca Thr cta Leu tat	Gln 245 tcg Ser tca Ser ttt Phe tat	gct Ala gga Gly gga Gly aat Asn 310	gct Ala cca Pro gcg Ala 295 ggt Gly	Thr gaa Glu gaa Glu 280 ctg Leu cag Gln	tta Leu 265 agg Arg ggt Gly tac	Trp 250 agg Arg cac His cct Pro caa Gln	gat Asp cta Leu tgc Cys tgc Cys 315	atg Met ttg Leu cca Pro 300 agt Ser	ctt Leu gat Asp 285 gtc Val ggt Gly	gag Glu 270 cgc Arg tgt Cys aat Asn	Gly 255 gct Ala tgt Cys gct Ala gtg	aat Asn aat Asn tca Ser 320	816 864 912
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RAW SEQUENCE LISTING

DATE: 08/14/2001 TIME: 15:54:41

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269 Arg 9gg aag cat teg acc aag gga tta ggc aaa acc gtg cac ctg gag 2784 269 Arg 6ly Lys His Ser Thr Lys Gly Leu Gly Lys Thr Val Pro Leu Glu 915 270 915 272 tca gag ttt gtg aag tgag ggg gat gat gtc gta gtt ccc tgc ggc aag 2832 273 Ser Glu Phe Val Lys Trp Arg Asp Asp Val Val Val Pro Cys Gly Lys 930 274 930 275 940 276 ccg gtg cca tca tca att agg agc tct gaa ctc att gat aag tac 2880 277 Pro Val Pro Ser Ser Ile Arg Ser Ser Glu Leu Met Tyr Asn Glu Tyr 950 280 atc gtc tac aac aca tcc cag gtg aag atg cag ttc ttg ctg aag gtg 281 Ile Val Tyr Asn Thr Ser Gln Val Lys Met Gln Phe Leu Leu Lys Val 965 280 atc gtc tca ca aag agg tag 285 Arg Phe His His Lys Arg 965 284 cgt ttc cat cac aag agg tag 285 Arg Phe His His Lys Arg 960 285 Arg Phe His His Lys Arg 980 287 <211> LENGTH: 982 291 <212> TYPE: PRT 292 <213> ORGANISM: Zea mays 294 <220> C213> LENGTH: 982 291 <212> TYPE: PRT 292 <213> ORHER INFORMATION: Xaa=unknown 300 <400	266	5 G <u>r</u> y	ASL	Met	900	GIU	ı Leu	і гуз	Lys	Ala 905	Thi	Sei	Met	Asp	Lys	s Pro	Pro	·
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/236,995B

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DATE: 08/14/2001 PATENT APPLICATION: US/09/236,995B TIME: 15:53:57

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VERIFICATION SUMMARY

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Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF3\08142001\1236995B.raw

L:161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 L:529 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:530 SEQ:5 L:530 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:3 L:532 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5 L:532 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:3